

Centre Piece

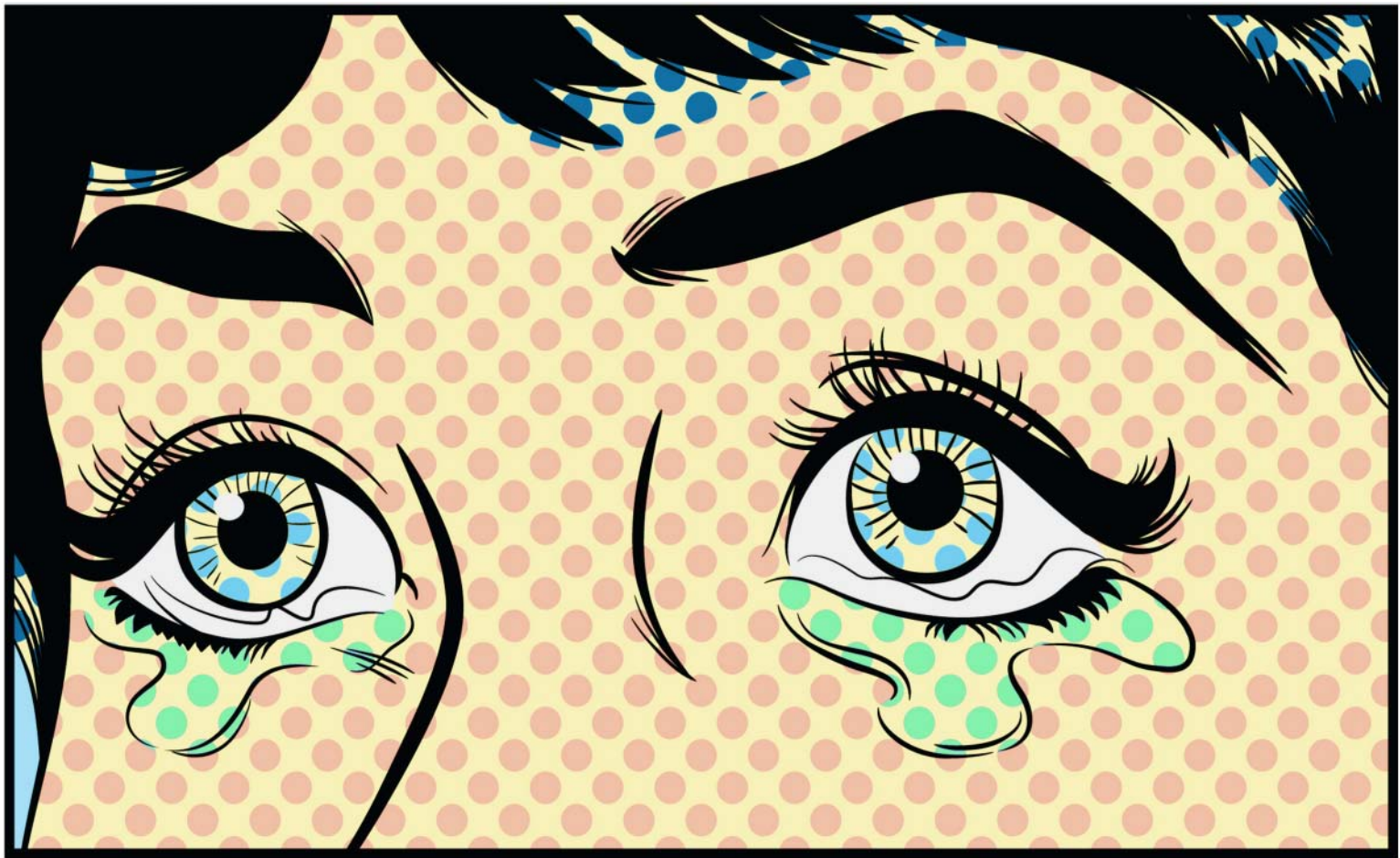
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Lobbying
Export success
Policy uncertainty

Letters by economists
School inspections
High-speed rail



What makes people happy?

CentrePiece



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

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Editorial

What makes people happy? Nearly 20 years ago, the Centre for Economic Performance (CEP) organised its first conference on this question under the title 'Happiness at LSE'. Since then, understanding wellbeing – and what practical actions might be taken to promote it – have been a central part of the Centre's research agenda. At the same time, promoting happiness has increasingly been seen in some government circles as a legitimate ambition of public policy alongside the more traditional goals of supporting economic growth and employment.

In this issue of *CentrePiece*, CEP's founder director Richard Layard outlines the development of happiness research at LSE and its interactions with policy: 'the main aim of social science should be to throw light on the conditions conducive to happiness', he concludes. Two further articles look at the relationships between people's working environments and their wellbeing, and

between crime in a local area and the mental health of both victims and non-victims.

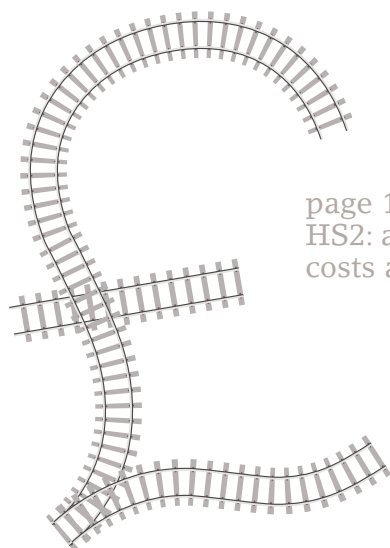
There is much more about wellbeing on our website, including recordings of a public debate between Lord Layard and his fellow peer Robert Skidelsky on whether happiness is the right measure of social progress, and of the two latest events to celebrate the Centre's 21st birthday. Former CEP researcher Andrew Oswald gave a fascinating lecture on herd behaviour and the phenomenon of 'keeping up with the Joneses'; and Nobel laureate Daniel Kahneman discussed his acclaimed new book, *Thinking Fast and Slow*.

Elsewhere in this magazine are several topical pieces. Henry Overman questions the UK government's decision to go ahead with HS2, the new high-speed rail line. Iftikhar Hussain summarises his evidence that the Ofsted inspection system has proved effective in raising educational standards in England.

And Nicholas Bloom argues that weak economic growth in Europe and the United States is in part due to heightened uncertainty about economic policy-making.

CEP researchers are also deeply involved in a new initiative launched in January: the LSE Growth Commission. Co-chairs Tim Besley and CEP's director John Van Reenen outline its aims thus: 'Even in times of slow growth and protracted economic turbulence, it is essential to stay focused on the key drivers of prosperity over the long term. The LSE Growth Commission will use frontier research to provide a framework for policy-making in the UK to support sustainable growth.' How the growth agenda fits with the happiness agenda will be an interesting challenge for researchers and policy-makers.

Romesh Vaitilingam, Editor
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Pupils' progress: how children's perceptions influence their efforts

Sir!
Sir!
Sir!

In the latest of CEP's 'big ideas' series, **Richard Layard** outlines the development of the Centre's research on what makes people happy and how society might best be organised to promote happiness.

Big ideas

Wellbeing and public policy



How can we maximise people's happiness and which institutions, policies and norms will best achieve this goal? It was to answer this question that the subject of economics was developed – and it was why I became an economist.

Economics has done a great deal to improve the human lot. But unfortunately it has had too narrow a view of the sources of happiness and misery – too focused on the standard of living. This became obvious nearly 40 years ago when Richard Easterlin pointed to the survey evidence that despite massive rises in living standards, happiness was not increasing (Easterlin, 1974). He attributed this to the fact that people compare their income with other people's incomes and with their own recent experience.

In 1980, I wrote an article about the policy implications if that were true (Layard, 1980). At that time, there was virtually no evidence about the determinants of happiness. Over the last 30 years, all that has changed and there is now a vigorous infant science of happiness. At the same time, we have had the continuing experience of ever rising incomes associated with no increase in happiness in the UK and several other countries, including Germany and the United States.

From these two influences – the science and the popular experience – has emerged a major worldwide movement to establish subjective wellbeing as the accepted goal of public policy. Pioneers of this movement have been the OECD, the French president Nicolas Sarkozy and the UK's prime minister David Cameron.

CEP researchers have also played an important part. In the 1990s, Andrew Oswald (who is now at the University of Warwick) pioneered the analysis of micro-data (including from the then newly established British Household Panel Survey) where the outcome of interest was happiness. He made an enormous impact by using international surveys, such as Eurobarometer, to show how similar were the quantitative effects of bad experiences, such as unemployment and bereavement, in different countries (Oswald, 1997).

Much of Andrew Oswald's work was done with David Blanchflower and Andrew Clark, and all three have become

major figures in the field. He also organised CEP's first conference on happiness in November 1993, where the participants included Daniel Kahneman, a psychologist who a decade later received the Nobel prize for economics, and two other psychologists, Peter Warr and Kamal Birdi from the University of Sheffield. At that time, it was rare for economists and psychologists to work together.

In 2005, I wrote a book on happiness, now in its second edition, in which I tried to juxtapose the philosophical arguments in favour of wellbeing with the evidence on its causes – and thus derive some important policy implications (Layard, 2011). The book has sold over 150,000 copies in 20 languages. From it has followed the Centre's research programme on wellbeing, designed to push forward our understanding but also to produce practical action. We can begin with the practical action.

The first area here has been mental health. By analysing data on a typical group of adults (participants in the 1970 British Cohort Survey, when they were 34 years old in 2004), it is possible to explain their reported levels of happiness and misery. The results show that mental health eight years earlier explains four times as much of the misery in our society as does the level of current family income.

Mental illness also has massive economic costs, putting over one million people onto incapacity benefits.

According to another survey, the national Psychiatric Morbidity Survey, one in six adults would be diagnosed as suffering from clinical depression or crippling anxiety disorders, but only 25% of these are in treatment, compared with nearly 100% for most physical illnesses. This is shocking – not only because of the avoidable human misery but also because, as one of our studies shows, if cognitive behavioural therapy (CBT) were made generally available, it would pay for itself through savings on incapacity benefits and lost taxes (Layard et al, 2007).

That 2007 paper was written with LSE's Martin Knapp, the UK's leading expert on the economics of mental health, and David Clark of the Institute of Psychiatry at King's College, who is one of the world's leading experts on CBT. To improve things, we formed the LSE Mental Health Policy Group, which in 2006 produced *The Depression Report*. This included the proposal to train up to 10,000 therapists in the UK to deliver effective therapy services in the NHS (CEP, 2006).

The government essentially accepted our proposals and they are now being rolled out nationally as the Improving Access to Psychological Therapy Programme (IAPT) over a six-year period (2008-14). David Clark and I are actively involved as advisers to the programme, and have published two evaluations of it, (Clark et al, 2009; Gyani et al, 2011) – one on the two pilots and one on the first year of roll-out – which confirm the soundness of our original cost-benefit analysis.

In its original form, the programme covered only adults and not children. But in 2007, I became a member of the Good Childhood Enquiry and was co-author of its final report (Layard and Dunn, 2009). One key chapter was on child mental health, where, with Stephen Scott of King's College, we developed the proposal for an IAPT programme for children. The government has accepted a version of our proposal and the programme begins in 2012.

It would obviously be better to prevent mental illness than to have to cure it once it has developed. Fortunately, there are now many programmes for school children

The main aim of social science should be to throw light on the conditions conducive to happiness



Evaluation of much of government policy could be undertaken with happiness being the criterion of benefit



that attempt to do that and have shown significant results. One of the best known is the Penn Resiliency Programme, developed at the University of Pennsylvania using the basic ideas that underlie CBT.

With the help of the Young Foundation and the Local Government Association, we found three local authorities that were interested in piloting the programme in England. Altogether 22 schools participated and the programme was found to reduce the incidence of teenage depression significantly, especially for those most at risk (Challen et al, 2011).

Over 60 schools now use the programme, and more and more staff are being trained through the mechanism we initiated. But the programme is quite short: it takes 18 hours per pupil. To achieve a more substantial impact requires many more hours.

In the UK, most secondary school children spend one hour a week for five years on 'personal, social and health education' (PSHE), most of which probably has no effect. Even the most structured programme of 'social and emotional aspects of learning' (SEAL) in secondary schools has been shown to have no effect (Humphrey et al, 2010). To replace this ineffective method, we have

trawled through all the world's best programmes and constructed an evidence-based curriculum for 140 hours, which we are hoping, with government backing, to pilot shortly (Layard et al, 2011).

Having a job is a key element of wellbeing, so we have continued to press two of the Centre's oldest ideas – the apprenticeship guarantee (now an object of government policy) and a limit to life on unemployment benefits. As the recession began, Paul Gregg and I designed what we called the Job Guarantee (Gregg and Layard, 2009), which the Labour government implemented as the Future Jobs Fund. Despite favourable evaluations, this has now been abolished.

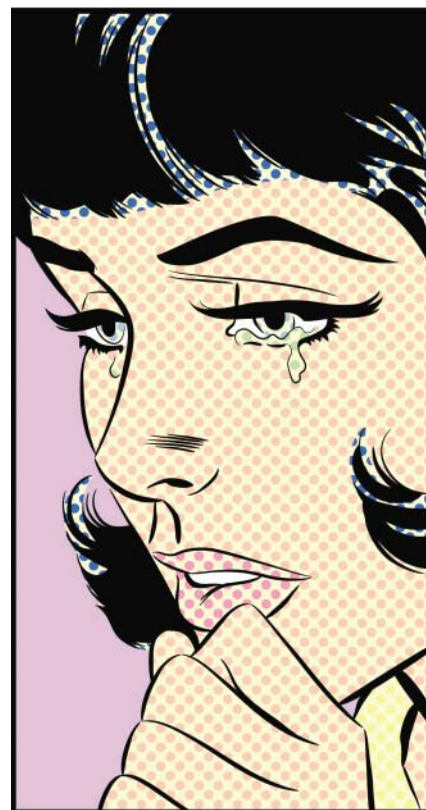
But perhaps our biggest, and least effortful, success has been on the national measurement of wellbeing. In 2008, the Office for National Statistics decided to have some work on this and commissioned me, Robert Metcalfe of the University of Oxford and Paul Dolan, a wellbeing economist recently appointed to an LSE chair in social policy, to advise them (Dolan et al, 2011).

Our proposed questions (see box) are now being asked of 200,000 people in the government's Integrated Household Survey, and the answers will appear regularly in the country's official statistics. Through the mediation of the OECD, most advanced countries can be expected to follow suit.

Integrated Household Survey questions on subjective wellbeing

I would like to ask you four questions about your feelings on aspects of your life. There are no right or wrong answers. For each of these questions I'd like you to give an answer on a scale of nought to 10, where nought is 'not at all' and 10 is 'completely'.

- 1. Overall, how satisfied are you with your life nowadays?**
- 2. Overall, to what extent do you feel that the things you do in your life are worthwhile?**
- 3. Overall, how happy did you feel yesterday?**
- 4. Overall, how anxious did you feel yesterday?**



There have of course been intellectual challenges to the wellbeing movement. To promote understanding of our viewpoint, we sponsored a major collaborative conference on happiness and public policy, the papers from which were published as a special issue of the *Journal of Public Economics* (Besley and Saez, 2008). In it, two colleagues and I investigated the rate at which the marginal utility of income declines as people get richer. We found that marginal utility is inversely proportional to income – an old idea going back to the eighteenth century mathematician Daniel Bernoulli, but never before directly investigated.

More recently, some distinguished authors have questioned Richard Easterlin's original hypothesis. But in one paper, we were able to show that at least in the UK, the United States and West Germany, average happiness has not grown while average real income has shot up. The key reason is that people mainly value their income in relation to the income of others, just as Easterlin first suggested (Layard et al, 2010).

We are now embarking on a major systematic study of wellbeing over the life course, with three aims. The first is to build a comprehensive model that really shows how much different factors matter. The second is to disentangle the true

causal effects of people's experiences by properly controlling for genetic influences. And the third is to use the findings, combined with experimental evidence, to show how policy evaluation of much of government policy could be undertaken with happiness, rather than willingness-to-pay, being the criterion of benefit.

In my view, the wellbeing movement is unstoppable. Happiness is the only good that is self-evidently that, a 'good' – and we are coming to know more and more about the conditions that make us happy or otherwise. But there is a long way to go and the main aim of social science should be to throw light on the conditions conducive to happiness and the ways in which those conditions can be produced.

The CEP and the LSE are the obvious focal point for this work. We are proud of what we have done, grateful to those who have financed us (especially the Esmée Fairbairn Foundation) and impatient to push further with more complete models of wellbeing over the individual life course. London is a great place for all this, with the fruitful interaction of economists, psychologists and psychiatrists that we experience in our seminars. I have no doubt that happiness and wellbeing will become more and more central concepts in our culture – and in labour economics, where so many of us began.

Over the past
50 years, we
have had the
continuing
experience of
ever rising
incomes
associated with
no increase
in happiness



Professor Lord **Richard Layard** is director of CEP's research programme on wellbeing.

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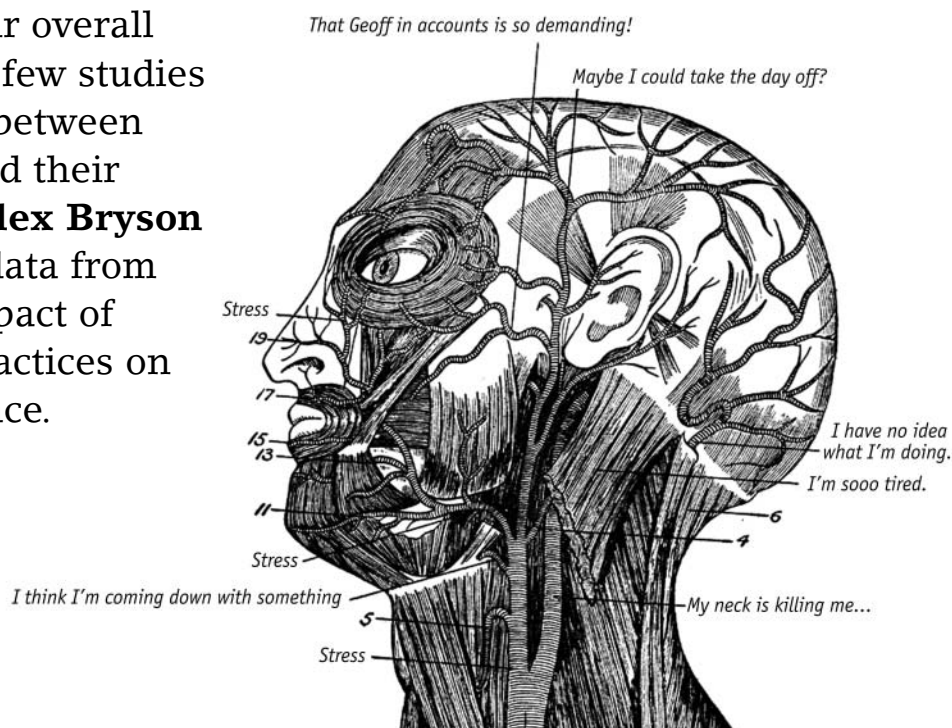
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How people feel about their jobs is an important part of their overall happiness yet until now, few studies have explored the links between employees' wellbeing and their working environment. **Alex Bryson** and colleagues analyse data from Finland to assess the impact of modern management practices on wellbeing in the workplace.



Wellbeing in the workplace:

the impact of modern management

There is a growing body of evidence that modern practices of 'high involvement management' increase the profitability of firms. These techniques – which seek to engage employees more fully in their jobs – were first articulated and advocated by management thinkers in the early 1980s. But it is only recently that economists have realised their impact on firm performance (Bloom and Van Reenen, 2010).

High involvement management presumably improves firm performance through its impact on employees. But what does it do for their happiness at work? Modern management practices could be beneficial for employees' wellbeing – by enriching their jobs, by giving them more autonomy, by rewarding effort fairly or by building effective

teamwork – or they could be damaging – by monitoring performance and enforcing targets in an overbearing way or by demanding more effort for less pay.

The scant evidence on this question is mainly based on case studies of particular occupations or self-selected samples of employees. Initial studies of high involvement management indicated clear productivity improvements but a barely discernible negative impact on employees' wellbeing (Appelbaum et al, 2000). A second generation of studies, however, paints a more complicated picture.

For example, high involvement management can enrich people's work, leading to improvements in job satisfaction, but sometimes these come at the expense of increased absenteeism (Frick and Simmons, 2011). This is because greater job demands, which are often

valued by employees, induce stress unless they are able to tackle demanding tasks in a fashion that best suits them.

But in many workplaces, job control is not ceded to employees and, to make matters worse, the social support from

High involvement management is associated with higher job satisfaction, less tiredness and a lower probability of accidents

which employees might benefit psychologically – supportive supervision, for example, or effective union representation – are also lacking (Wood and Bryson, 2009).

In a new study, we analyse nationally representative data for Finland, a country renowned for being an 'early mover' in high involvement management. It is also a country whose work practices are located within a wage structure and industry mix that, one might imagine, would be conducive to 'work enriching' high involvement management rather than being geared towards labour intensification.

Our survey asked employees which practices they are exposed to in their job, including autonomous teamwork, performance-based incentive pay, systematic training and information-sharing by management. We estimate the effects of these practices on accidents in the workplace and three measures of wellbeing:

- Sickness absences, both short- and long-term.

- Subjective wellbeing – that is, self-reported job satisfaction, work capacity, state of health and feelings of tiredness.

- Physical discomfort at work, as measured by the experience of pain in four different parts of the body: the lumbar region, legs, arms and neck.

In seeking to identify any causal linkage between high involvement management and employees' wellbeing, the chief obstacle is non-random exposure to high involvement management. It is likely that those who do not feel up to high involvement will simply avoid it, potentially biasing any positive association between high involvement management and wellbeing.

We are able to overcome this problem with very rich data on employee absence and earning patterns that go back eight years prior to the survey. We are thus able to account for patterns and incidence of prior sickness absence, thus ensuring that our estimates are not simply a product of employee selection.

We find that high involvement management is positively associated with various aspects of employees' wellbeing. In particular, it is strongly associated with higher evaluations of subjective wellbeing,

In some circumstances, high involvement management can have negative effects on employees' wellbeing

including higher job satisfaction and fewer feelings of tiredness at work. It is also associated with a lower probability of having a workplace accident.

But high involvement management is also associated with having more short absence spells. This may be because working in such a system is more demanding than standard production and because multi-skilled employees cover for each other's short absences.

So the nature of high involvement management appears to be important for employees' wellbeing, but it is not the only aspect of modern management that influences wellbeing. Another is the way in which new practices are introduced. What appears to matter here is employee involvement in the process of consultation and negotiation leading to change.

In a separate study of UK data, we find that organisational change is positively associated with increased job-related anxiety, but this anxiety is absent where employees are covered by a union involved in organisational changes (Bryson et al, 2012). Where employees are not covered by a union, however, the anxiety effects of high involvement management are still apparent, even if they are involved in consultation over change.

Overall, this body of research indicates the potential benefits of high involvement management for firms, but it also shows that there are circumstances in which it can have negative effects on employees' wellbeing. In trying to minimise these costs, firms should consider not only what combination of practices will improve performance, but also how best to introduce those practices and monitor the effects on their workforce.

This article summarises 'Does High Involvement Management Improve Worker Wellbeing?' by Petri Böckerman, Alex Bryson and Pekka Ilmakunnas, CEP Discussion Paper No. 1095 (<http://cep.lse.ac.uk/pubs/download/dp1095.pdf>).

Petri Böckerman is at the Labour Institute for Economic Research, Helsinki. **Alex Bryson** of the National Institute of Economic and Social Research is a visiting research fellow in CEP's labour markets programme. **Pekka Ilmakunnas** is at Aalto University School of Economics.

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Firms should monitor the effects of new management practices on their workforce

in brief...

Crime and mental wellbeing

Crime has clear costs for its victims, but it might also cause considerable harm to other local people who fear being victims in the future. **Francesca Cornaglia** and **Andrew Leigh** measure the impact of crime on the mental wellbeing of both victims and non-victims, as well as the effects of crime reporting by local media.

In 2006, the US Senate Committee on the Judiciary heard evidence from two sources on the economic cost of crime. The director of the Bureau of Crime Statistics told the committee that according to surveys, the financial cost of crime to victims and their families is \$16 billion annually. Immediately afterwards, economist Jens Ludwig told the committee that, based on survey respondents' willingness to pay to reduce crime in their communities, the cost of crime is \$694 billion per year.

This 40-fold disparity between the direct costs to victims and the wider community's willingness to pay to reduce crime suggests an intriguing notion. What if most of the social cost of crime is not endured by victims but by non-victims? What if the financial impact of crime on those who are killed, assaulted or robbed is just the tip of the iceberg for calculating the costs of crime?

The idea that the costs of crime for non-victims may be important was noted by Jeremy Bentham as long ago as the late eighteenth century. He gave the example of a man who is robbed on a road, where the 'primary mischief' arises from the physical harm and loss of possessions occurring from the robbery, but the crime also has a 'secondary mischief':

'The report of this robbery circulates from hand to hand, and spreads itself in the neighbourhood. It finds

its way into the newspapers, and is propagated over the whole country. Various people, on this occasion, call to mind the danger which they and their friends, as it appears from this example, stand exposed to in travelling; especially such as may have occasion to travel the same road.'

What is important about this effect of crime – which Bentham referred to as 'the alarm' – is that it affects a much larger number of people than the direct impact of crime. As philosopher Jonathan Wolff pointed out in the 2005 Bentham lecture at University College London, even if the probability of harm is very low, 'the fear can be ever-present for a great number of people, depressing their lives'. The cost of crime may therefore be far larger

Increases in crime rates have a negative impact on the mental wellbeing of local residents



than commonly suggested by methods that evaluate only the effects on victims and their immediate family.

In a new study, we combine detailed crime statistics with panel survey data that provide detailed indicators of mental wellbeing for the same people over a six-year period, 2001-06. The 'Household, Income and Labour Dynamics in Australia' (HILDA) survey combines measures of respondents' tiredness, difficulties with work and social activities because of physical or emotional problems, and nervousness and depression into an overall indicator called the Mental Component Summary (MCS).

The HILDA data also include information on which people have been crime victims. This makes it possible to examine separately the effects that changes in crime in a local area have on changes in the mental wellbeing of resident victims and non-victims (controlling for changes in local economic conditions).

There is a particular analytical challenge involved in investigating the effects of being a victim of crime on people's mental wellbeing: the possibility of 'sorting' – that certain people who are more likely to be victims of crime may at the same time experience lower mental wellbeing. As far as we know, no previous study has been able to estimate the effects of different crimes on the mental wellbeing of victims, taking account of the potential selection of vulnerable individuals into incidences of crime.

Our analysis finds a strong relationship between being a victim of crime and mental wellbeing for both property crimes and violent crimes: a seven percentage point fall in the MCS for these people. Taking account of the potential selection of vulnerable individuals suggests that sorting is indeed a problem. Nevertheless, we still find a considerable impact on mental wellbeing (a two percentage point fall in the MCS), which is predominantly driven by being a victim of a violent crime.

Local media coverage of criminal activity enhances the negative effect of crime on wellbeing

Turning to non-victims, we find significant and sizeable effects of violent crime on the mental wellbeing of non-victims in the local area. Distinguishing between different categories of violent crime, it seems that these effects are driven by incidences of assaults, including sexual assault, and robbery. Thus, these results provide evidence for the hypothesis that by reducing the wellbeing of non-victims, the costs of crime may be substantial.

We also examine the role of local media coverage in enhancing the effect on mental wellbeing of crime rates within an area. Extensive coverage of crime incidences in local newspapers may exacerbate the effect of criminal activity on the mental wellbeing of non-victims. To our knowledge, no previous work has quantified such effects nor, more importantly, assessed the 'multiplier' effect of area crime through media coverage on mental wellbeing.

We find that the intensity of reporting of crime increases its negative effect on mental wellbeing. This suggests that media reporting plays an important role in enhancing the negative effect of crime on non-victims in the local area.

This article summarises 'Crime and Mental Wellbeing' by Francesca Cornaglia and Andrew Leigh, CEP Discussion Paper No. 1049 (<http://cep.lse.ac.uk/pubs/download/dp1049.pdf>).

Francesca Cornaglia is a research associate in CEP's labour markets and wellbeing programmes and a lecturer at Queen Mary, University of London. **Andrew Leigh**, a former professor of economics at the Australian National University, is a member of the Australian House of Representatives.

Ofsted inspections of schools have been a central feature of state education in England for nearly 20 years. Research by **Iftikhar Hussain** explores the validity of the school ratings that Ofsted produces, the impact of a fail rating on subsequent pupil performance and the extent to which teachers can 'game' the system.

School inspections: can we trust Ofsted reports?





How to ensure that teachers, doctors and other public sector employees act in the best interests of the users of public services is a challenge facing governments around the world. Many have responded by making increased use of *objective* performance targets, such as pupil test scores for schools and patient waiting times for hospitals.

Empirical evidence suggests that organisations given incentives to perform on such measures often ‘game’ the system, subverting the intention behind the target. For example, schools might try to raise their average test score by excluding lower ability pupils from the test. Or when given a target for pupils to attain a certain level in key stage tests, teachers might focus on pupils on the margin of this achievement level, at the expense of both high and low ability pupils.

In England, and in the UK more broadly, top-down performance targets have often been complemented by inspection regimes. Examples include the school inspection system run by Ofsted (the Office for Standards in Education), and the Care Quality Commission for the healthcare sector. In fact, the UK is something of a world leader in the area of inspections.

The *subjective* nature of the performance evaluation undertaken by inspectors holds the promise of ‘measuring what matters’. But inspections may open up a whole new can of worms. In particular, just like targets, inspections are top-down and, what’s more, the officials who lead them may be prone to biases and prejudices. Left to their own devices to exercise judgement as they see fit, it is unclear whether inspectors will act in the best interest of pupils and parents. Neither pro- nor anti- inspection

arguments have been backed by hard empirical evidence and this research seeks to remedy this gap.

New evidence on inspection systems

In the absence of previous empirical evidence – from the UK or elsewhere – this study uses the case of Ofsted inspections of state schools in England to provide some evidence on the effectiveness of such subjective performance evaluation systems. The first question addressed is whether inspection ratings provide any extra information on school quality, over and above what is already available in the public sphere.

This ‘validity test’ is implemented as follows: are inspection ratings correlated with underlying school quality measures – constructed from teenage pupils’ survey reports of teacher practices as well as parental satisfaction – after controlling for standard observable school characteristics, such as test score rankings and the proportion of pupils eligible for free school meals? If they are, then inspection ratings have the potential to play an important role in providing information for parents considering which school they would like their children to attend.

The next question addressed is whether pupil test scores improve following a fail inspection. This is a thorny empirical problem because it suffers from the classic problem of ‘mean reversion’ – the idea that a failed school’s test performance would have improved (reverted to the mean) even in the absence of a fail inspection.

Relatedly, whether schools are able to game the system and artificially boost performance following a fail inspection is also addressed. The post-fail incentives to game are strong and the prior evidence – from England and elsewhere – suggests

that when teachers are put under pressure to raise pupil test scores, they may well resort to such strategies.

The nature of Ofsted school inspections

Broadly speaking, Ofsted inspections of schools have three main objectives: first, to offer feedback and advice to the head and other teachers; second, to provide information to parents to aid their decision-making; and third, to identify schools that suffer from ‘serious weakness’.

Over the period covered by my research (2005/6 to 2008/9), schools were generally inspected once during an inspection cycle. An inspection involves an assessment of a school’s performance on academic and other measured outcomes,

Inspections
produce ratings
that can help
parents
distinguish
between more
and less
effective schools

The inspectors seem able to identify poorly performing schools, leading to test score gains

followed by an on-site visit to the school.

For the visit, inspectors arrive at the school at very short notice (no more than a few days), which in theory should enable them to see the school as it 'really is' and limit disruptive 'window dressing' in preparation for the inspections. During the inspection, the inspectors collect qualitative evidence on performance and practices at the school. This involves classroom observations, in-depth interviews with the school leadership, examination of pupils' work as well as discussions with pupils and parents.

At the end of this process, the school is given an explicit headline inspection rating – 1 (outstanding), 2 (good), 3 (satisfactory) or 4 (unsatisfactory, also known as a fail rating) – and the inspection report is made available to parents and posted on the internet.

Do inspection ratings convey any new information on quality?

Previous research suggests that inspectors' findings are reliable, in that two inspectors independently observing the same lesson will come to very similar judgements about the quality of classroom teaching. The issue addressed here is whether inspection ratings are also valid, in the sense of being correlated with underlying measures of school quality not observed by the inspectors. There is almost no empirical evidence on this question.

I construct a measure of underlying school quality from 14-year-old pupils' survey responses to questions about teacher behaviour and practices. These data come from the Longitudinal Survey of Young People in England, a major survey supported by the Department for Education.

The survey asks six questions on how likely teachers are to: take action when a

pupil breaks rules; make pupils work to their full capacity; keep order in class; set homework; check that any homework that is set is done; and mark pupils' work. Further analysis using pupils' reports of school discipline as well as parents' reports of satisfaction levels yields very similar results to those reported here for the teacher practices outcome.

A composite pupil-level score of teacher practices at the school is computed by taking the average of the responses to these six questions. The validity test is then undertaken by asking the following question: can inspection ratings help distinguish between (or forecast) schools with good and poor teacher practices?

The critical issue is whether inspection ratings summarise information about underlying school quality that is not already available in the public sphere. My findings demonstrate that on this measure at least, inspectors appear to be doing a reasonable job. Even after controlling for things like test scores and the socio-economic background of pupils, inspection ratings appear to have substantial power in predicting underlying quality.

These results suggest that parents who are looking for a good school ought to place at least some weight on inspection ratings. The actual weight will depend in part on how much information parents already have about the relevant schools, beyond publicly available information such as test scores.

The effect of a fail inspection

Turning to the effects of a fail rating on a school's future test scores, the data show that pupils' performance on key stage tests improves following a fail inspection. But whether this is a consequence of the fail inspection or simply a bounce back after a year or two's bad luck is a difficult question to answer. To make progress on

this issue, I exploit a design feature of the English primary schools' testing system to solve this mean reversion problem. Key stage 2 tests for Year 6 (age 11) pupils are administered in the second week of May in each year. These tests are marked externally, and results are released to schools and parents in mid-July.

The window between May and July allows me to address the issue of mean reversion: schools failed in June are failed *after* the test in May but *before* inspectors know the outcome of the tests. Thus the May test outcome for these schools is not affected by the subsequent fail; neither do inspectors select them for failure on the basis of this outcome.

By comparing schools failed early in the academic year – September, say – with schools failed in June of the same academic year, I can isolate mean reversion from the effect of the fail inspection. If there is any rebound in test scores independent of the fail inspection, we should see it in the schools failed in June. As a check on this approach, a comparison of observable characteristics prior to the fail rating for schools failed in June (the 'control' group) and schools failed in the early part of the academic year (the 'treatment' group) reveals negligible differences between the two groups.

The results show that a fail inspection leads to significant improvements in test scores. Furthermore, the largest gains are for pupils scoring low on the prior (age 7)

Children of
low-income
parents benefit
most from school
inspections

By subjecting schools to close scrutiny, inspectors can play an important role in limiting teachers' ability to 'game' the system

key stage 1 test. The gains are large compared with the effects of other policy interventions that pupils might experience, such as having higher quality teachers or attending a school with higher attainment levels.

These findings are consistent with the view that the children of low-income parents – who are, arguably, the least vocal in holding teachers to account – benefit the most from inspections. Such evidence may be especially relevant in the current policy environment, where first, there is heightened concern about raising standards for this group of children, and second, they are hard to reach using other policy levers.

Evidence on gaming behaviour

Finally, this research also looks into possible strategic behaviour by teachers. I find little evidence to suggest that schools failed by the inspectors are able to inflate their pupils' test performance by gaming the system. First, teachers do not exclude low ability pupils from the test-taking pool.

Second, although the evidence on whether teachers target pupils on the margin of attaining the official proficiency level (level 4 on the key stage 2 test) is mixed, I find no evidence to suggest that some groups (say, very low or very high ability pupils) are adversely affected by the fail inspection.

Third, although test gains fade somewhat over time, there is evidence to suggest that for some pupils, the gains last into the medium term, even after they have left the failed primary school. This suggests that teachers inculcate real learning and not just test-taking skills in response to the fail rating.

These findings on strategic behaviour are in stark contrast to a significant body of evidence demonstrating dysfunctional

responses to test-based performance evaluation in other settings. My interpretation of these results is that by subjecting schools to close scrutiny, inspectors may play an important role in limiting such distortionary activities.

Conclusions

What are the broader lessons from this study? The findings are particularly noteworthy given the indications from past research that subjective assessments may give rise to various biases. For example, there is evidence to suggest that subjective evaluations of workers may lead to 'leniency' and 'centrality' bias in private firms (Prendergast, 1999). And evidence from the public sector points to staff indulging their preferences when allowed to exercise discretion rather than following formal rules (Heckman et al, 1996).

Although such biases in school inspectors' behaviour cannot be ruled out, this research demonstrates that the inspection system appears to be effective along the following two dimensions: first, inspectors produce ratings that make it easier to distinguish between more and less effective schools; and second, they are able to identify poorly performing schools, leading to test score gains.

One important feature of the English school inspection system is that the key output produced by the inspectors – an inspection rating and report – is available for public consumption on the internet. Consequently, inspectors' decisions are themselves subject to scrutiny and oversight. One hypothesis for future research is that this is a key element in driving the positive results found in this study.

This article summarises 'Subjective Performance Evaluation in the Public Sector: Evidence from School Inspections?' by Iftikhar Hussain, Centre for the Economics of Education Discussion Paper No. 135 (<http://cee.lse.ac.uk/ceedps/ceedp135.pdf>).

Iftikhar Hussain is a lecturer in economics at the University of Sussex and a research associate in CEP's programme on education and skills.

Further reading

James Heckman, Jeffrey Smith and Christopher Taber (1996) 'What Do Bureaucrats Do? The Effects of Performance Standards and Bureaucratic Preferences on Acceptance into the JTPA Program', in *Advances in the Study of Entrepreneurship, Innovation and Growth, Volume 7* edited by Gary Libecap, JAI Press

Canice Prendergast (1999) 'The Provision of Incentives in Firms', *Journal of Economic Literature* 37(1): 7-63



in brief...

Pupils' progress: how children's perceptions influence their efforts

What is the impact of a pupil's perceptions of how their teachers will treat them on their motivation, efforts and educational achievements? To explore this question, **Amine Ouazad** and **Lionel Page** have conducted an experiment in which school children could use pocket money to place small bets on their performance in an exam.

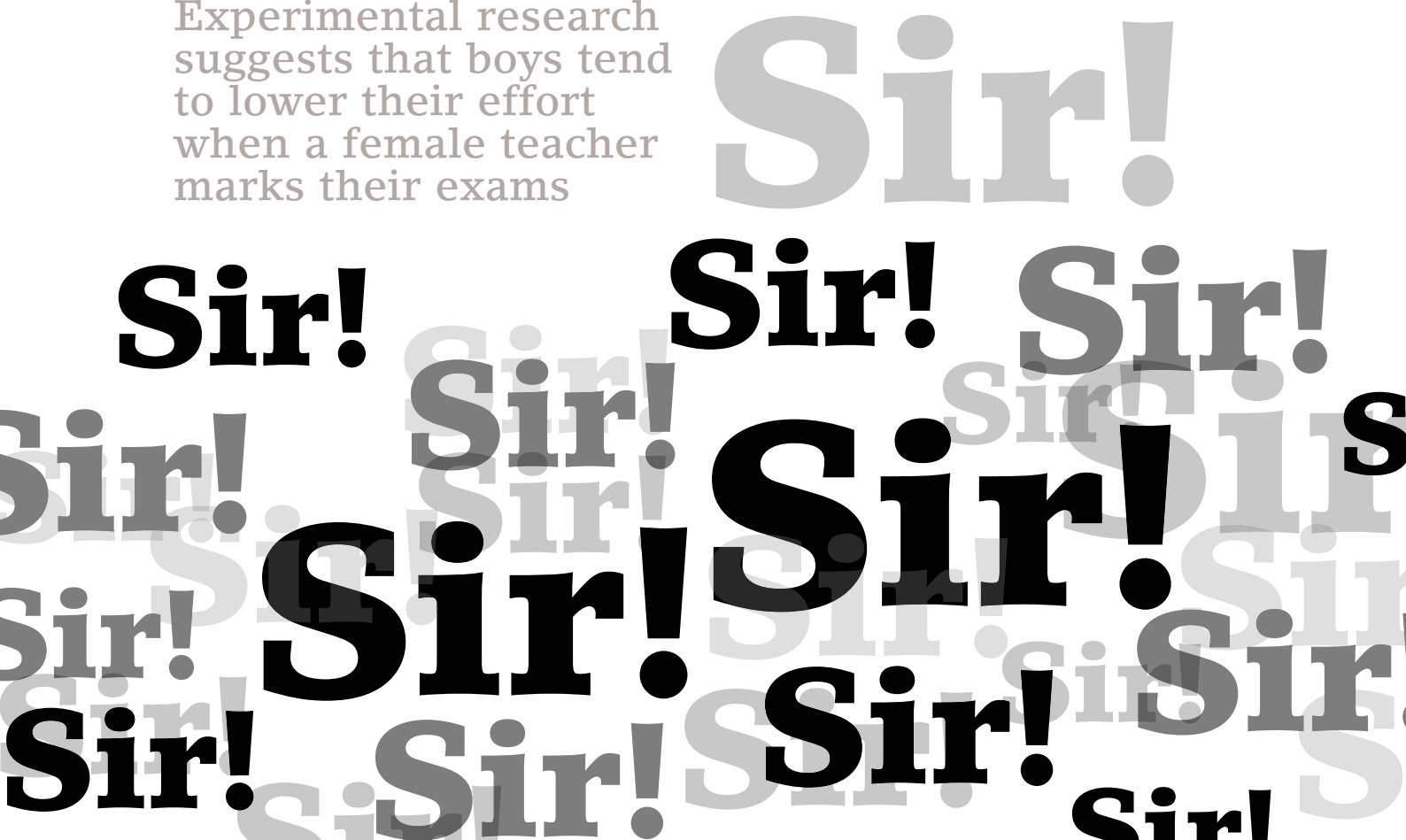
The impact of discrimination against particular social groups has been widely analysed for its effects on people's access to jobs, housing and education. Yet perceptions of discrimination also matter. For example, given that job search takes time and effort, applicants who believe that potential employers are likely to discriminate against them may not apply for those jobs. Similarly, pupils who believe that their efforts will not be rewarded may disengage and thereby reduce their chances of making progress.

How can we measure perceptions of discrimination? Asking individuals directly can provide some information, but it is difficult to infer strong conclusions from such questionnaires. Stated perceptions may differ from what actual behaviour reveals.

Our research brought experimental economics to 1,200 pupils in 29 schools across England. Pupils were given an endowment – equivalent to the average weekly pocket money in England – and could either keep this endowment or 'invest' it in an exam that would be marked by either their teacher or an anonymous external examiner. If the exam answers were right, pupils could double their weekly pocket money.

The crux of the experiment is that pupils invested their money in the exam only if they believed that their chances of doubling their investment were large. We asked pupils a number of questions about the school and their teachers that allowed us to single out money as the main driver of their decisions. For example, pupils who believed

Experimental research
suggests that boys tend
to lower their effort
when a female teacher
marks their exams



that a good relationship with the teacher matters were no more likely to invest more.

The results of the experiment show that male pupils tended to lower their investment when a female teacher marked their exams. Further analysis confirmed that female teachers in the experiment did tend to award lower marks to male pupils than external examiners. So male pupils' perceptions seem to be roughly in line with female teachers' marking practices. Our results suggest that male pupils believe that their chances of getting an answer right are three percentage points lower when marked by a female teacher than when marked by an external examiner.

Female pupils tended to increase their investment when a male teacher marked their exams. Further analysis, however, showed that male teachers tended to reward female pupils no better than external examiners. Our results suggest that female pupils believe that their chances of getting an answer right are six percentage points higher when marked by a male teacher than when marked by an external examiner. Overall, female pupils' perceptions were not in line with teachers' marking practices: in fact, male teachers tended to reward male pupils more than external examiners.

We also find that ethnicity and socio-economic status (as indicated by eligibility for free school meals) did not play a role in pupil or teacher behaviour. Gender was the most important driving force behind the results. This is somewhat surprising given the large body of research devoted to teacher biases along ethnic or socio-economic lines.

We also wanted to confront our analytical method with the traditional method, which directly asks pupils about their perceptions. In our experiments, many pupils said they believed that 'ethnic minorities have equal opportunities at school' – and pupils who stated it strongly invested more.

What should we make of these striking results? Our exam mainly involved verbal skills, for which there is a substantial gender gap in favour of girls.

Underachievement and dropping out of school are a specifically male problem, and this experiment sheds new light on the determinants of this gender gap. Boys often disengage in the educational process, and this is likely to be due in part to their perceptions of their teachers.

In this context, it is notable that, in our experiments, male teachers induced more investment by boys. There is an under-representation of male teachers in both primary and secondary education in England. In primary schools, only 15% of teachers are male.

More generally, the experiments reveal that there is no specific reason why individuals' perceptions should be in line with actual discriminatory practices. Individuals may hold the wrong beliefs about the nature of discrimination. And even if they get it roughly right, they may overestimate or underestimate the extent of biases.

Furthermore, it is not clear that the discriminatory behaviour of some individuals – here, male teachers favouring male pupils – has a direct consequence for the population discriminated against – here, female pupils exert more effort when assessed by a male teacher.

This could be true in other contexts. The experimental design can be applied to job applications, dating, property searches and many other situations. Just by providing monetary incentives, a researcher can observe perceptions of discrimination directly from individuals' behaviour rather than from their stated perceptions. When money is at stake, people start calculating the costs and benefits of their actions and reveal what they truly believe rather than what they say they believe.

Girls have better perceptions of male teachers – but male teachers do not reward them more than female teachers

Sir!

Sir!

Sir!

yes miss.

This article summarises 'Students' Perceptions of Teacher Biases: Experimental Economics in Schools' by Amine Ouazad and Lionel Page, Centre for the Economics of Education Discussion Paper No. 133 (<http://cee.lse.ac.uk/ceedps/ceedp133.pdf>).

Amine Ouazad, an assistant professor at INSEAD, is a research associate in CEP's education and skills programme.

Lionel Page is a research fellow at the Queensland Institute of Technology.

in brief...

The returns to lobbying

Last autumn's resignation of Liam Fox, the UK's defence minister, put lobbying back in the spotlight. Research by **Mirko Draca** and colleagues on Washington's 'revolving door' lobbyists gives an indication of the value of political connections in the UK.

The resignation of cabinet minister Liam Fox in October 2011 was yet another challenge to public confidence in the UK's political system. It followed revelations about the expenses of members of parliament (MPs), controversy over the political power of Rupert Murdoch's News International, and severe criticism of former Labour cabinet ministers over the 'cabs for hire' lobbying scandal.

But what can we feasibly say about the returns to lobbying activity in the UK? Our study of the value of political connections in Washington looked at the revenues of US lobbyists who were previously employed by senators. These 'politically connected' lobbyists suffered a 24% fall in revenues when the senator that they used to work for left office. This fall in revenue was worth about \$177,000 in business and represents the value of a connection to a sitting legislator.

This figure can be used as something of a benchmark for calculating the value of being connected to a serving UK cabinet minister. Like senators, cabinet ministers have a lot of strategic power in policy-making and they seem to be the main target of lobbying activity in the UK political system.

Applying our US estimates directly suggests that the median return to a high-level UK connection could be around £122,000 per year. But it has to be said that our estimate is speculative. This is because there is no serious, publicly reported data on lobbying in the UK. We cannot conduct the same type of research here because there is no UK equivalent of the US Lobbying Disclosure Act.

In practice, the UK lobbying industry is likely to be much smaller than the US industry, which is worth \$3 billion annually. This is partly because there is less voting along party lines in the US Congress and representatives are therefore more open to influence from lobbyists. In the



Connections to a UK cabinet minister could be worth up to £122,000 a year for a working lobbyist

Transparency in the UK needs to embrace the US model, where each lobbying contract is reported on a quarterly basis



UK, cabinet ministers (rather than non-cabinet MPs) are the focus of lobbying because of their direct decision-making power.

The types of returns to connections seen in the United States are therefore most likely to be concentrated at the cabinet level. The figure of \$177,000 also relates to middle ranking lobbyists. At the upper end of the US industry, 'superstar' lobbyists will have practices worth about \$1.5 million per year and a single senate-level connection would then be worth \$370,000.

The scale of the business dealings of Adam Werritty, Liam Fox's associate, suggests that the return to cabinet-level access in the UK could also be very high. That said, Werritty's case is unusual because it appears that he was functioning as a lobbyist and as a political adviser at the same time. This would have been difficult to achieve in the more transparent US and Canadian systems.

This underscores the need for a UK Lobbying Disclosure Act. Furthermore, transparency in the UK needs to go beyond a simple 'register' of lobbyists – the main current proposal – and embrace the US model, where each lobbying contract is reported on a quarterly basis.

'Revolving Door Lobbyists' by Jordi Blanes i Vidal, Mirko Draca and Christian Fons-Rosen is forthcoming in the *American Economic Review*. It was published as CEP Discussion Paper No. 993 in August 2010 (<http://cep.lse.ac.uk/pubs/download/dp0993.pdf>).

Jordi Blanes i Vidal is a lecturer in LSE's management department and a CEP research associate. **Mirko Draca** is a CEP research economist. **Christian Fons-Rosen** is an assistant professor at Universitat Pompeu Fabra. All are part of CEP's research programme on productivity and innovation.

Public debate continues to rage about the decision to build a new high-speed rail line from London to Birmingham (and possibly beyond). In the latest in our series on policies of the coalition government, **Henry Overman** considers some of the arguments for and against the scheme – and indicates why it has been so controversial.

HS2: assessing the costs and benefits

When governments try to make a decision on big transport projects, the most desirable starting point is a cost-benefit analysis, which carefully assesses whether, and by how much, the benefits to the country will outweigh the costs. Traditionally, these analyses have taken a rather narrow focus, looking at the direct user benefits – that is, the benefits to people making journeys.

In the case of the HS2 high-speed rail link between London and the North, these benefits – faster journeys, less disruption, more capacity – are potentially large. Unfortunately, so are the costs – and both the costs and benefits are highly uncertain.

Supporters of the scheme think that

the costs of HS2 are being overstated by focusing on the total costs and ignoring the split between revenues and subsidies. They say that fares would reduce the costs to the government from around £30 billion to £17 billion.

Opponents of the scheme think that the benefits – estimated at around £47 billion – are being overstated because they are partly calculated by turning time savings on HS2 into money by ‘valuing’ the time that people would save. The problem with this, they argue, is that the number used to value time savings is too high because it assumes that people are unproductive on trains.

Some supporters don’t disagree on this point, but they think that the benefits

are understated because the number of passengers will be higher than predicted. They argue that HS2 uses conservative numbers for passenger growth. There are railway experts, however, that think that HS2 has overstated passenger growth by using projections from more recent years, when the growth of passenger numbers has been high.

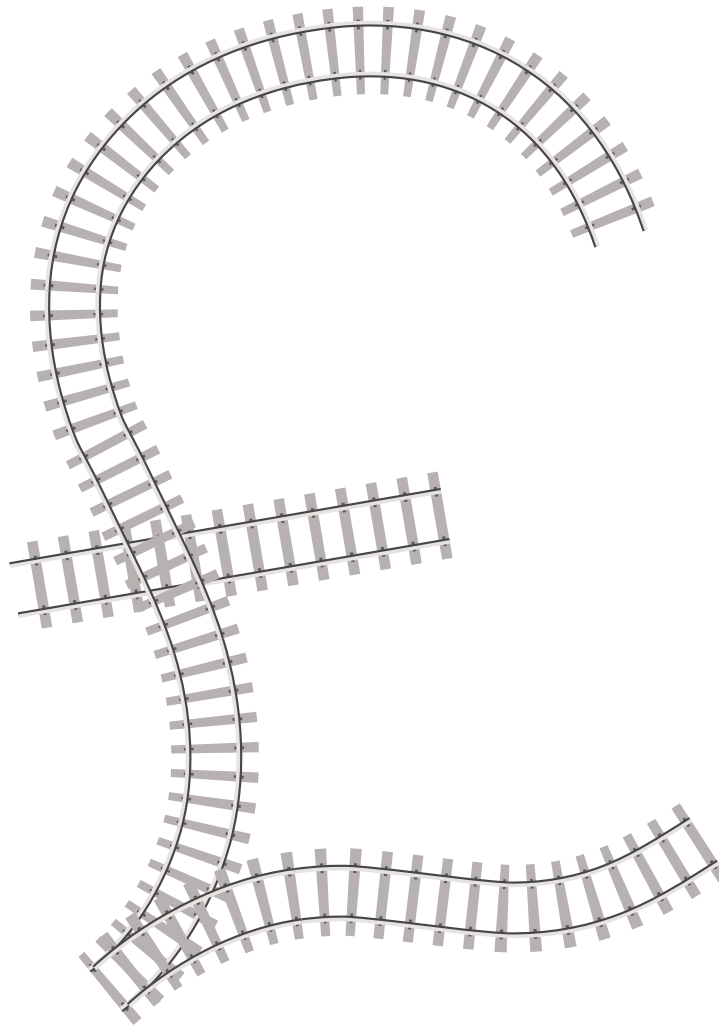
In short, there is plenty to argue about even if one focuses narrowly on these direct user benefits and costs. But as anyone who has been following the debate will know, the arguments do not just focus on these narrow issues. Unfortunately, the wider costs and benefits of HS2 are, if anything, even more uncertain.

Take, for example, the claim by the transport secretary, writing in the *Telegraph* to mark the end of the public consultation, that high-speed rail is 'the fast track fix for bridging the North-South divide'. This is a clever, but completely misleading, headline. The article itself is more tempered – 'tackling a divide that has lasted for generations is no easy task' – but it still makes big claims for the potential impact of high-speed rail.

These claims rely on the assumption that reducing journey times (and increasing capacity) will help firms and workers in the North to compete more effectively for market share in the South (or encourage firms and workers to relocate). But HS2 will also give firms in the South better access to markets in the North. In line with this informal intuition, Nobel laureate Paul Krugman and other researchers working on the so-called 'new economic geography' have shown that reducing transport costs between 'core' (the South) and 'periphery' (the North) may actually increase disparities, not reduce them. Certainly the evidence on the direct benefits suggests that these flow disproportionately to London and the South East.

What about the environmental impact? In terms of carbon emissions, the impacts are not large and could well be negative. Most of the journeys on high-speed rail will be additional (or transfers from other lines). Extra journeys and faster journeys generally require more energy not less (especially if people drive to the train station). There will be some savings on long distance car trips and domestic air travel – but the latter will be offset if freed

Reducing the costs of transport between the South and the North may actually increase disparities not reduce them



up slots are used for other flights or if HS2 makes getting to Heathrow easier and so generates additional numbers on other routes.

The overall impact depends on what is assumed about how electricity is generated. Generous assumptions using average, not marginal, carbon figures make the numbers look better. The last time I looked at these numbers, HS2 was predicting a change in average annual emissions in a range from -0.41 to +0.44 million tonnes. This is equivalent to just +/-0.3% of current annual transport emissions (and ignores the carbon impact of construction). So the impacts are not large and could be negative.

Other environmental impacts arising from the need to bulldoze a straight high-speed train line through some beautiful countryside are harder to express in financial terms. These effects clearly explain much of the bitter local opposition from people on the route. Actions to mitigate them provide yet another illustration of how costly HS2 could prove to be.

For example, the final decision on HS2 was delayed while the transport secretary decided whether to spend an extra £500 million on another tunnel under the Chilterns. To put that figure in perspective, we should note that it is three times the amount allocated to local

Both the costs and benefits of HS2 are potentially large – but they are also highly uncertain

transport projects by the Autumn 2011 spending review.

Given all these uncertainties, it is not hard to see why public opinion is so divided. When the Department for Transport asked people about HS2 last year, 47% were in favour of HS2 and 9% against. That sounds like resounding support, until one notes that half of the respondents (50%) agreed that 'high-speed rail is £30 billion we cannot afford' while only a quarter disagreed with this statement. In short, the public are in favour of high-speed rail, providing that they do not have to pay for it.

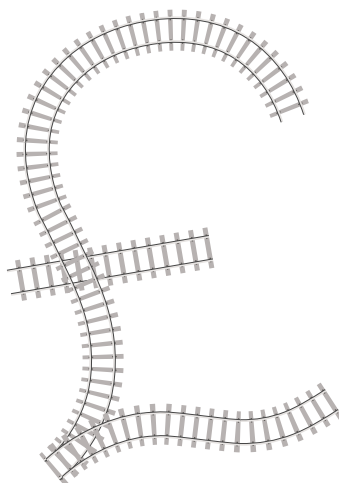
The poll is also interesting on the perceived benefits: 56% of adults agreed that high-speed rail would be better for the environment while 63% thought it would create jobs and growth. As I have shown, the evidence is fairly weak on the former claim. And just as with the effects on the North-South divide, the effects on jobs and growth, other than the direct impact of construction, are unknown. (What's more, construction jobs are part of the cost to the economy – a much misunderstood point.)

The fact that opinion polls highlight these two 'benefits' suggests that most people don't know much about the scheme – which turns out to be true: 42% say that they know little or not very much about the scheme, while 47% say they know nothing.

In short, the costs and benefits of HS2 are large and uncertain. I prefer instead to focus on the opportunity costs: are there things that we could be doing with £30 billion that would yield a higher return than '£47 billion'? I think the answer is almost certainly yes, in both the area of transport – more intra-city schemes, for example – and more widely.

On the basis of narrow cost-benefit analysis, this conclusion is backed up by the Eddington report, published in 2006. Comparing the figures for HS2 with those for projects that the Department for Transport had on its books at the time of Eddington suggests that HS2 is, at best, in the bottom quartile in terms of returns (and indeed, might be closer to being in the bottom 10%).

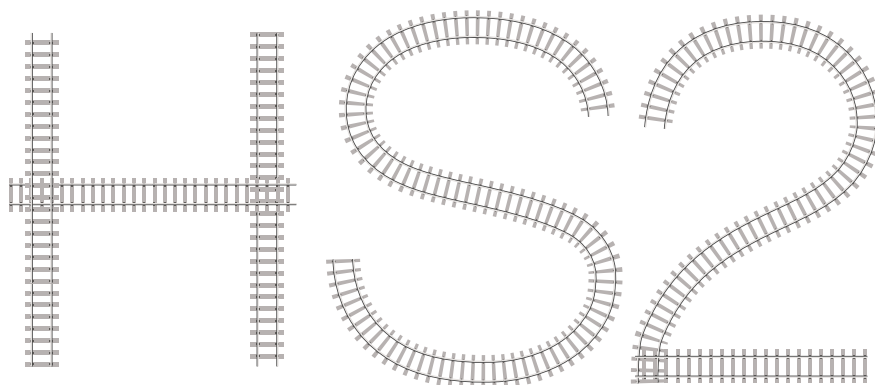
One could say that this is irrelevant because HS2 has a critical mass that will deliver wider benefits. But as I have argued, there is a little evidence to support this assertion. If critical mass is



important, then we could consider concentrating a large amount of investment in particular cities – for example, Birmingham, London, Manchester and Newcastle. To the best of my knowledge, no one has assessed what such a package would look like in terms of the wider impacts.

One final objection to my negative conclusion might be that 'we have to have HS2 because of capacity constraints on the west coast mainline'. Unfortunately, as the Eddington report showed, by the time HS2 is completed, there will be a great deal of congestion all over the transport network. Other schemes to tackle that congestion are likely to deliver much better returns because these aspects are well captured by traditional cost-benefit analysis and, as I have indicated, HS2 does pretty badly on that.

In short, the opportunity costs of HS2 are large. To me, this is the fundamental issue and the reason why I am personally sceptical about the merits of the project. Quite simply, I remain unconvinced that this is the best way for the government to spend money. Over the last few years, none of the assertions to the contrary has changed my mind that this remains the central problem with HS2.



Henry Overman is director of the Spatial Economics Research Centre (SERC), professor of economic geography at LSE and a research associate in CEP's globalisation programme.

Further discussions of HS2 – and many other policy issues around cities, regions, transport, housing and the environment – are available on the SERC blog: <http://spatial-economics.blogspot.com/>

Disclosure: Henry Overman sits on the HS2 analytical challenge panel and has received funding from the Department for Transport to look at the wider impacts of transport investment.

The
opportunity
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money

The damaging impact of economic uncertainty on growth has been reasonably well studied – but what happens when there is uncertainty about economic policy-making? **Nicholas Bloom** and colleagues have developed a measure of this distinct kind of uncertainty, one that shows the value of restoring stability to current policy actions.

Policy uncertainty: a new indicator

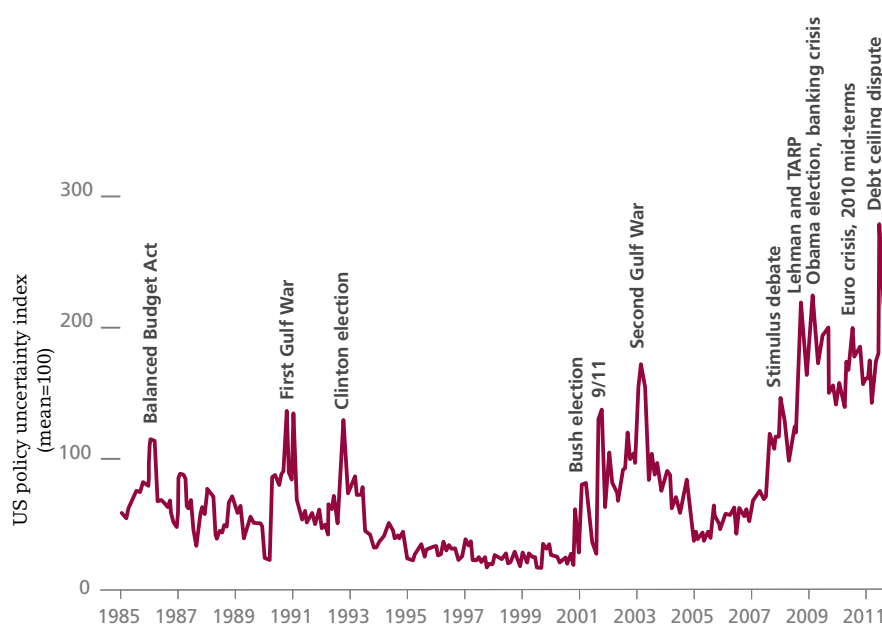
The most striking thing about the recent volatility of global financial markets is that politicians are making the news. The actions of policy-makers and their statements about budgets, bailouts and regulatory reforms are driving the stock market gyrations.

This is not normal. Before the financial crisis of 2008, stock markets usually moved in response to economic news. Strong GDP and employment figures would send the markets soaring. Poor corporate earnings would send the markets crashing.

But today, all eyes are on the policy-makers. Unfortunately, they cannot agree, which is generating massive uncertainty. In fact, according to our new index, which charts the evolution of US economic policy uncertainty since 1985, it is now close to its all-time high (see Figure 1). This policy uncertainty is a key factor stalling the recovery and threatening a return to recession.

We construct our index of policy uncertainty by combining three types of information: the frequency of newspaper

Figure 1:
Index of US economic policy uncertainty



Notes: The index is composed of three sets of measures: monthly news articles containing 'uncertain' or 'uncertainty', 'economic' or 'economy', and policy-relevant terms (scaled by the smoothed number of articles containing 'today'); the number of tax laws expiring in coming years; and a composite of quarterly forecasts of government expenditures and one-year CPI (consumer price index) from the Philadelphia Fed Survey of Forecasters. The data are available at www.policyuncertainty.com.

articles that reference economic uncertainty and the role of policy; the number of federal tax code provisions that are set to expire in coming years; and the extent of disagreement among economic forecasters about future inflation and future government spending on goods and services.

Our index shows sharp spikes in economic policy uncertainty around major elections, wars and the 9/11 terrorist attacks. More recently, it spiked sharply after the Lehman bankruptcy in September 2008 and the passage of the TARP (Troubled Asset Relief Program) legislation shortly afterwards. It has remained high ever since, driven by continuing policy uncertainty around the 2010 US mid-term elections, the US debt ceiling dispute and the crisis of the eurozone.

Of course, policy uncertainty could be high simply because general economic uncertainty is also high. To test this view, we use Google News listings to construct a broad index of economic uncertainty and a narrower index focused squarely on policy uncertainty.

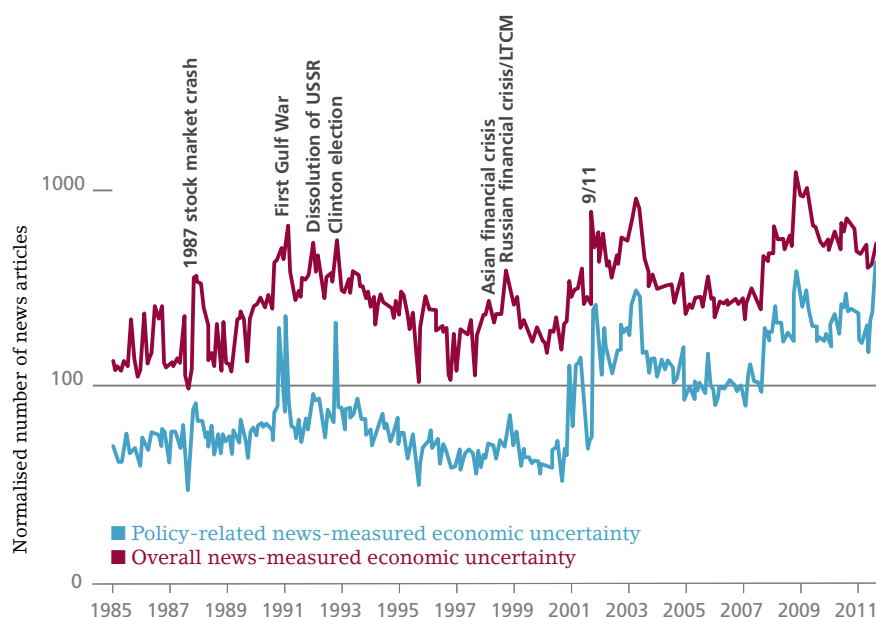
Comparing these two indices reveals several episodes that involve large spikes in economic uncertainty but little or no jump in policy uncertainty (see Figure 2). Examples include the Asian financial crisis of 1997 and several bouts of recessionary fears in the second half of the 1980s. In short, the data refute the view that economic uncertainty necessarily breeds policy uncertainty.

So why is policy uncertainty so high now? To identify the drivers of policy uncertainty, we drill into the Google



Figure 2:

Economic policy uncertainty and overall economic uncertainty



Notes: The overall news-based economic uncertainty index is composed of the monthly number of news articles containing 'uncertain' or 'uncertainty' as well as 'economic' or 'economy' (scaled by the smoothed number containing 'today').

Recent policy uncertainty has emerged from the US debt ceiling dispute and the eurozone crisis

News listings and quantify the mix of factors at work. Several factors underlie the high levels of US policy uncertainty in 2010 and 2011, but monetary and tax issues predominate.

One clear example involves the Bush-era income tax cuts originally set to expire at the end of 2010. Democrats and Republicans adopted opposing positions about whether to reverse these tax cuts. Rather than resolve the uncertainty in advance, Congress waited till the final hour before deciding to extend the tax cuts.

Other examples include recent moves in the US Senate to increase tariffs on Chinese imports, which threaten to set off a trade war. And in Europe, the continuing debates over potential bailouts for countries and banks contribute to a climate of policy uncertainty.

What makes policy uncertainty so harmful? When businesses are uncertain about taxes, healthcare costs and regulatory initiatives, they adopt a cautious stance. Because it is costly to make a hiring or investment mistake, many businesses naturally wait for calmer times to expand. If too many businesses wait to expand, the recovery never takes off. Weak investments in capital goods, product development and worker training also undermine longer-run growth.

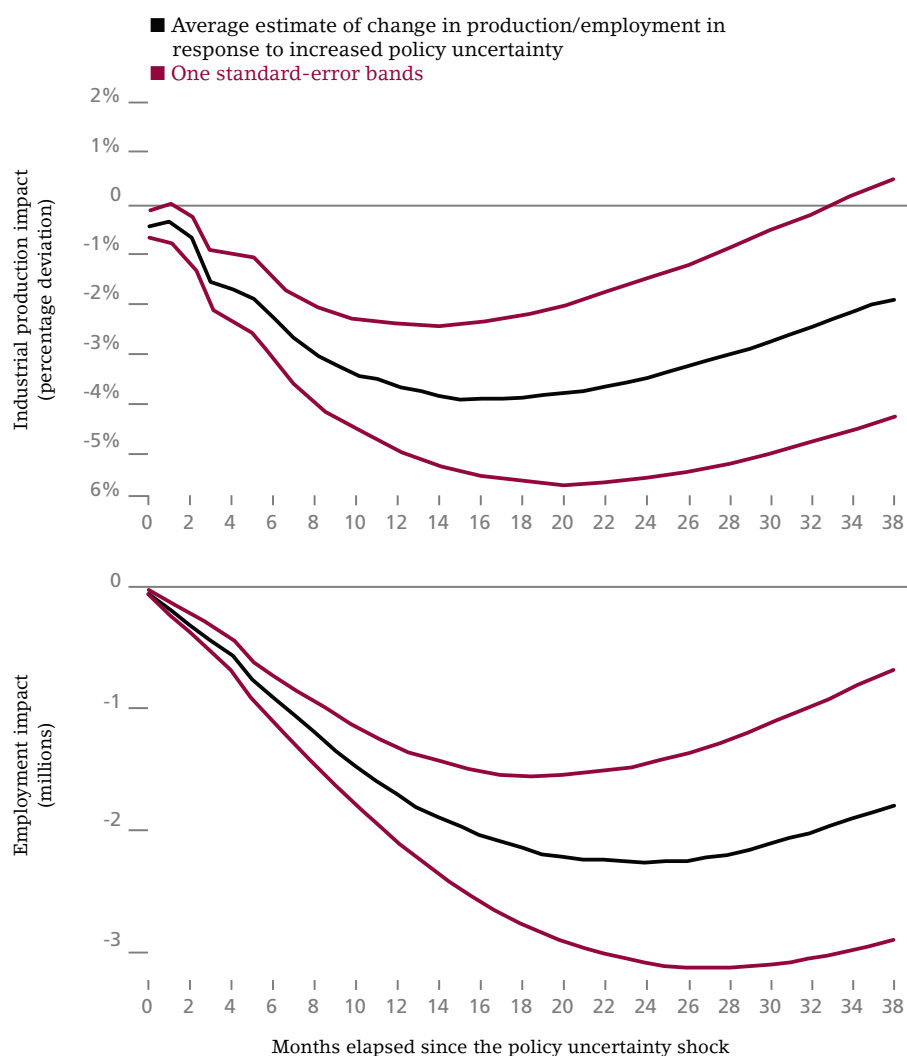
How much near-term improvement could we expect from a stable, certainty-enhancing policy regime? We use techniques developed by Christopher Sims, one of the two 2011 Nobel laureates in economics, to estimate the effects of economic policy uncertainty.

The results for the United States suggest that restoring 2006 (pre-crisis)

Restoring pre-crisis levels of policy uncertainty could boost production and employment significantly

levels of policy uncertainty could increase industrial production by 4% and employment by 2.5 million jobs over 18 months (see Figure 3). That would not be enough to create a booming economy, but it would be a big step in the right direction.

Figure 3:
US production and employment after a policy uncertainty shock



This article summarises 'Measuring Economic Policy Uncertainty' by Scott R Baker, Nicholas Bloom and Steven J Davis (www.policyuncertainty.com).

Scott R Baker is at Stanford University. **Nicholas Bloom**, also at Stanford University, is a research associate in CEP's productivity and innovation programme. **Steven J Davis** is at the University of Chicago's Booth School of Business.

in brief...

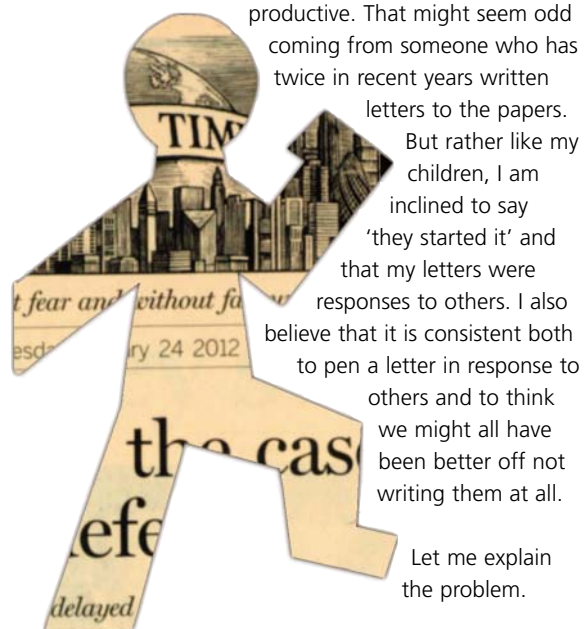
The letters page

Last autumn, the *Financial Times* published a series of letters from economists about the pros and cons of scrapping the 50p tax rate for high earners. **Alan Manning** questions the value of researchers conducting such debates about economic policy through the pages of newspapers.

On 7 September 2011, a letter from 20 eminent economists was published by the *Financial Times* urging the government to scrap the 50% marginal tax rate on annual incomes over £150,000 per year introduced in April 2010. The days that followed saw a flurry of letters both agreeing and disagreeing with this view. I myself contributed to it by having a letter published in the FT the following day.

I do believe it is important for social scientists to come out of their ivory towers and seek to influence debate about important issues of public policy. And because the press is one place where these debates are played out – and the letters pages the most readily available way to get one's ideas some publicity – it is perhaps natural to find economists writing letters to the newspapers.

But at the same time I have a lot of reservations about whether debates conducted through letter pages are really productive. That might seem odd coming from someone who has



twice in recent years written letters to the papers. But rather like my children, I am inclined to say 'they started it' and that my letters were responses to others. I also believe that it is consistent both to pen a letter in response to others and to think we might all have been better off not writing them at all.

Let me explain the problem.

There is an incentive to write 'group' letters to the newspapers as they get attention. The 50p letter to the FT was reported in most other UK newspapers, the subsequent letters expressing disagreement were not.

So if you want to influence policy in some way, then there is an incentive for making a pre-emptive strike. And you don't have to worry too much about the content of the letter: the authority of these letters is not really in their content but the signatories to them. This is probably just as well as the list of signatories is often much longer than the body of the letter.

Although it always helps to have someone high profile on board (DeAnne Julius played that role in the 50p letter), most of the signatories are probably unknown even to the highly educated readership of the FT. Sorry to disappoint those of my colleagues who think being a famous economist is the same as being famous.

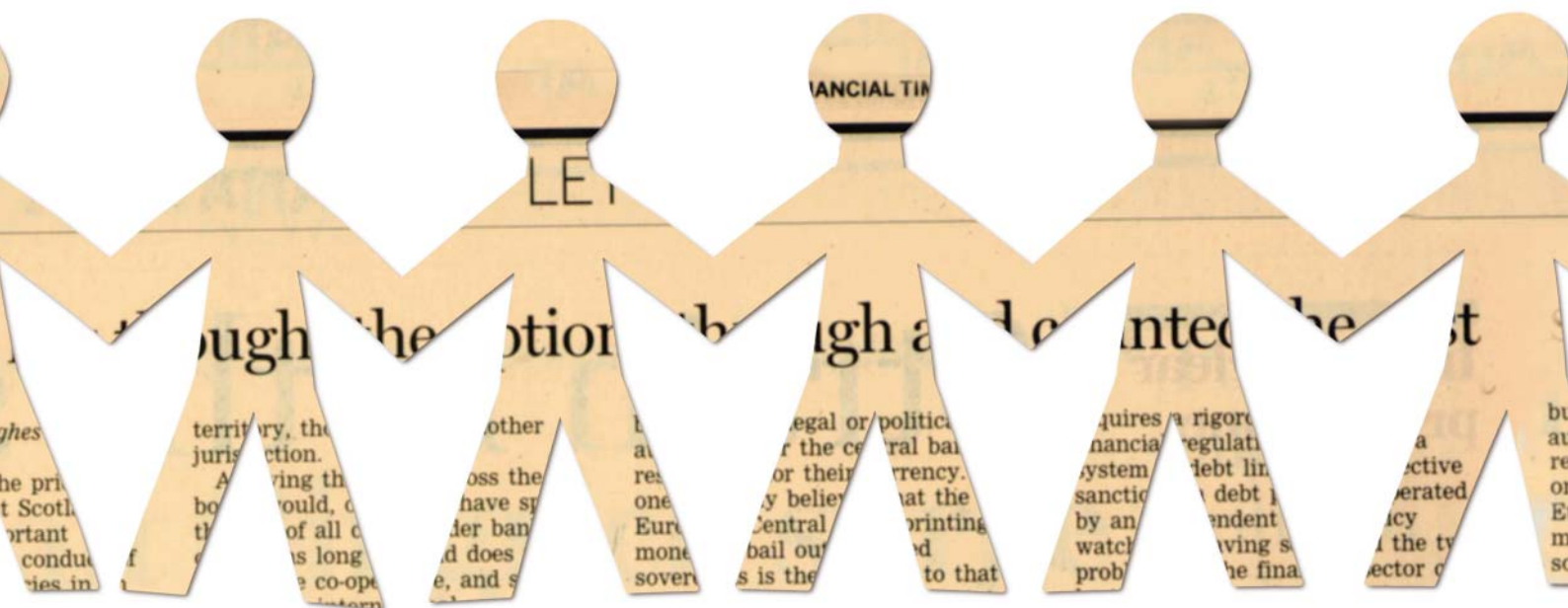
The best-known example of a group letter is the group of 364 economists who wrote to *The Times* in 1981 expressing their opposition to the policies of the Thatcher government – as if having one economist opposed for almost every day of a (non-leap) year made the content of the letter more compelling.

Given that the debate conducted on the letters pages often seems to come down to 'my list is longer than your list', it is not surprising that the general public end up with a rather low opinion of economists. In the case of the 50p letter, it was less than a week before the FT published a letter asking 'can any economist demonstrate their benefit... without another disputing it?' What starts off as a pre-emptive strike by one side ends up in mutually assured destruction for economists on all sides of the policy debate.



Academic debates conducted through newspaper letters pages are rarely productive

Economists have an obligation to provide serious evidence for their claims



Some of this reaction is a bit silly. Almost all contentious policy issues are complex with arguments for and against, rarely with all evidence pointing in one direction. The maximum length of a letter to the FT is not conducive to a nuanced discussion of the issues. But the way economists proceed also asks for such a reaction.

Newspapers will continue to want to publish such letters, so the only way to improve matters is for some degree of professional self-regulation. I would like public debate to be based on the issues not on appeals to authority – so let's see an end to group letters. Reducing the number of signatories would also free up column inches for the content of the letters. And let's make sure that we provide the workings behind our reasoning – not just our conclusions but why we have arrived at those conclusions.

My main issue with the initial letter on the 50p tax rate was that it simply consisted of an assertion, and it made no attempt to provide any serious evidence for its claims. It set a bad example for how serious economists go about their business.

What about the substance of the issue: should the UK retain or abolish the 50p tax rate on the top 1% of income earners? Here, I am not going to answer that question because the appropriate way for a professional economist to proceed is to wait until there is some

evidence on its impact. I think it is fairly clear what the main issues to look at will be: does the 50p tax rate act as a sizeable disincentive to work; does it encourage high earners to live elsewhere; and does it mean that high earners find ways to evade or avoid paying higher taxes?

We do have existing, though sometimes conflicting, evidence on related issues in other countries and other times. But we are going to have to wait for some evidence on the impact of the 50p tax rate and we should not pass judgment until that is in – which, according to recent newspaper reports, may be soon. The evidence may well be ambiguous but that is the best we will have.

Do I expect economists to adopt my self-denying ordinance with regard to group letters? I doubt it – self-regulation rarely works. So I fear I will find myself continuing to scan the letters pages of the FT ready to turn to my laptop to tap out another nail in the coffin that contains the reputation of economists.

Alan Manning is professor of economics at LSE and director of CEP's research programme on communities.

Many countries are looking to their export sectors as a source of future growth, but how do domestic companies make a success of selling their output abroad? Research by **Emanuel Ornelas** and colleagues finds evidence of 'sequential exporting' – firms experimenting in nearby foreign markets before seeking to become big exporters.

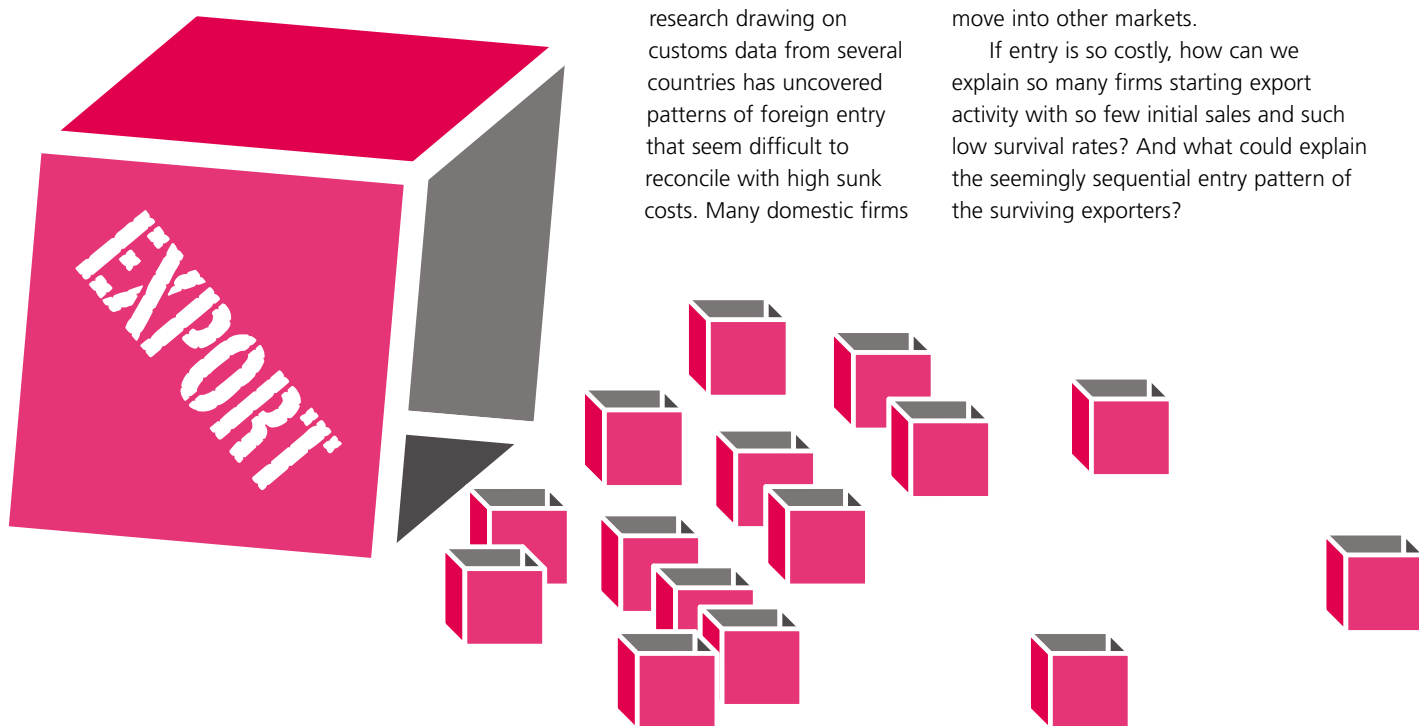
Sequential exporting: how firms break into foreign markets

How do firms break into foreign markets? Trade theory tends to emphasise the substantial 'sunk costs' that they have to incur to start exporting. The implication is that only the most efficient firms can afford to export.

Yet recent empirical research drawing on customs data from several countries has uncovered patterns of foreign entry that seem difficult to reconcile with high sunk costs. Many domestic firms

enter foreign markets every year; they often start selling small quantities to a single neighbouring country; and almost half of them stop exporting within a year. At the same time, new exporters that survive the first year tend to expand exports to their initial markets and also move into other markets.

If entry is so costly, how can we explain so many firms starting export activity with so few initial sales and such low survival rates? And what could explain the seemingly sequential entry pattern of the surviving exporters?



Our research conjectures that a central force behind this behaviour is the uncertainty that firms face about their own ability to export profitably. Because the drivers of export success are different for each firm (they are 'firm-specific'), they can only be uncovered when a firm actually starts exporting. But because they are uncertain and entry is costly, new exporters tend to start small to avoid adding negative variable profits to the potentially lost sunk costs.

At the same time, because what drives export success for an individual firm tends to have 'global scope' beyond the first market it enters, substantial entry costs lead new exporters typically to enter a single destination first and then to develop their export potential. If their performance is good in the first market, firms will gradually expand there and pursue 'sequential exporting' to other destinations.

Researchers in international business have long recognised that export profitability is uncertain and firm-specific. For example, an early study shows how the distinct knowledge and competencies associated with export success (which are typically related to product adaptation, marketing and distribution) are only acquired by firms once they start their foreign operations (Johanson and Vahlne, 1977).

Previous research has also illustrated how a company with global scope can apply knowledge from its initial foreign operations to new export destinations. Analysing firms in four emerging export sectors in Argentina, a recent study documents how such export-specific knowledge can be used when accessing different foreign markets (Artopoulos et al, 2011).

Similar reasoning applies to firm-specific characteristics of demand. For example, trade facilitation agencies, such as SITPRO in the UK, stress the importance of uncovering foreign demand for would-be exporters, indicating that the key uncertainty is about persistent components of demand, some of which may be present in multiple countries.

Developing our conjecture theoretically provides a number of novel implications for the dynamic behaviour patterns of exporting firms, which we test empirically. Using firm-level data on all Argentine manufacturing exports between 2002 and

2007, we find strong evidence that firms' first foreign destination plays a crucial role in explaining future patterns of foreign entry. It is in that first market where firms learn the most.

Specifically, as long as a firm continues to be an exporter, its growth on entry (at both the intensive margin – sales in the market – and the extensive margin – the number of markets served) is significantly higher in its first foreign market than in markets it enters subsequently. The outcome is similar for exit: a firm is more likely to stop right after entering its first foreign destination than it is to leave markets entered subsequently.

But if 'export experimentation' is indeed key, the differential effect of the first market should not apply universally to all exporters. For example, if the firm were to start exporting again after a break, there would no longer be a fundamental uncertainty to be uncovered.

Similarly, if a firm starts exporting by serving multiple markets, it must be because it is relatively confident about its export success – so on average the role of self-discovery should not be as pronounced for such firms as it is for single-market entrants. Uncertainty about export profitability should also be less marked for producers of homogeneous goods, for which global reference prices are available.

In turn, our theory about sequential exporting suggests that we should observe rapid first-market export growth, early entry into additional markets and frequent early first-market exit primarily among first-time, single-market exporters of differentiated products. This is indeed what we find empirically.

Hence, while firm-specific uncertainty is but one possible force shaping firms' export strategies, our evidence indicates that it plays an unequivocal role in explaining sequential exporting. Notice that our mechanism does not deny the possibility of a firm's productivity (and other characteristics) also shaping its export behaviour. Even if a firm becomes more efficient, which will raise the appeal of exporting, uncertainty about potential profitability in foreign markets could still trigger sequential exporting.

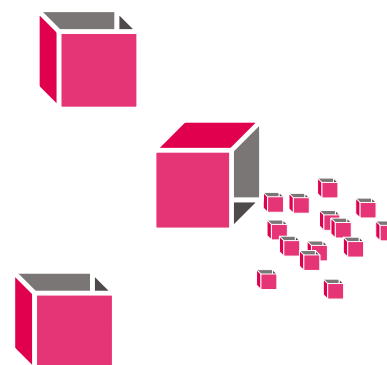
The policy implications of a process of sequential exporting driven by self-discovery are far-reaching. Consider the impact of trade liberalisation in nearby

Uncertainty about their potential profitability in foreign markets leads firms to pursue 'sequential exporting'

and distant countries for domestic firms.

When a nearby country lowers its trade barriers, it attracts exports from previously purely domestic firms. As these new exporters learn about their ability to serve foreign markets, some fail and give up exporting, whereas others are very successful and decide to expand into other foreign destinations. As a result, trade liberalisation in the nearby country promotes entry not only there but also in distant non-liberalising countries, albeit with a lag.

Similarly, the reduction of trade barriers in a distant country, by raising the value of profitably exporting there, also enhances the value of export experimentation in nearby markets, spurring entry into the latter even in the short run. Once some of the entrants realise a high export potential from their experience in the neighbours' markets, they move on to the market of the liberalising distant country.



Thus, our findings suggest the existence of a 'trade externality': lower trade barriers in a country induce the entry of foreign firms into other markets. For example, trade liberalisation in a distant but large country A (say, China) can induce firms from country B (say, the UK) to start exporting to nearby country C (say, Germany). This possibility could provide a novel motive for international coordination of trade policies, one that strengthens the rationale for institutions like the World Trade Organization (WTO).

If the trade externality is stronger at the regional level, this possibility could also help to explain the pattern of free trade agreements throughout the world. Indeed, the impact of trade agreements could be very distinct from what existing studies indicate.

For example, a regional trade agreement can boost export experimentation by lowering the costs of accessing the markets of bloc partners. As a result of more experimentation, a greater number of domestic firms would eventually find it profitable to export to countries outside the bloc. This would generate 'trade creation' that is very different from the concept that economists often emphasise: in addition to promoting intra-bloc trade, a regional trading bloc can also stimulate exports to non-members.

If the agreement were of the multilateral type, tracking down its effects becomes even trickier. Indeed, third-country and lagged effects of trade liberalisation may help to explain the difficulty in identifying significant trade effects of multilateral liberalisation, thus corroborating well-entrenched beliefs that the WTO (and its predecessor, the General Agreement on Tariffs and Trade) have been crucial in promoting world trade.

The process of sequential exporting suggests that lower trade barriers in one country can induce the entry of foreign firms into other markets

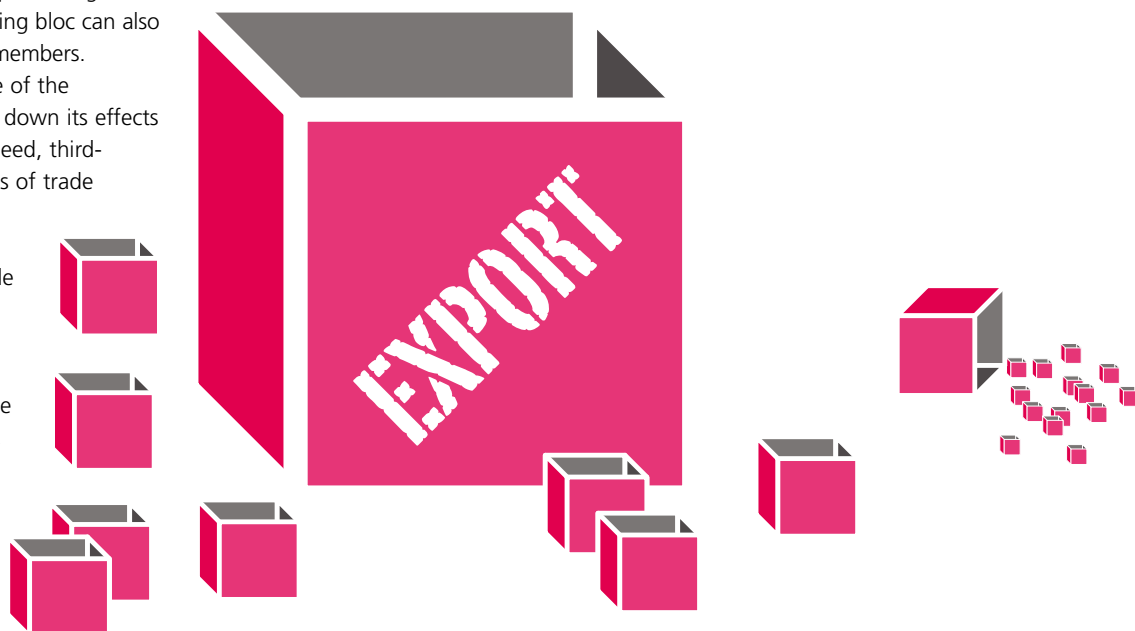
This article summarises 'Sequential Exporting' by Facundo Albornoz, Hector Calvo Pardo, Gregory Corcos and Emanuel Ornelas, CEP Discussion Paper No. 974 (<http://cep.lse.ac.uk/pubs/download/dp0974.pdf>).

Facundo Albornoz is at the University of Birmingham. **Hector Calvo-Pardo** is at the University of Southampton. **Gregory Corcos** is at the Norwegian School of Economics and Business Administration. **Emanuel Ornelas** is director of CEP's research programme on globalisation.

Further reading

Alejandro Artopoulos, Daniel Friel and Juan Carlos Hallak (2011) 'Lifting the Domestic Veil: The Challenges of Exporting Differentiated Goods Across the Development Divide', National Bureau of Economic Research Working Paper No. 16947

Jan Johanson and Jan-Erik Vahlne (1977) 'The Internationalization Process of the Firm – A Model of Knowledge Development and Increasing Foreign Market Commitments', *Journal of International Business Studies* 8: 23-32



Trade liberalisation in distant but large country A (say, China) may induce firms from country B (say, the UK) to start exporting to nearby country C (say, Germany)

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